

**WHAT IS CLAIMED IS :**

1. A method of interconnection, through a gateway, between a first network of type IEEE 1394 enabling communications between a plurality of HAVi compliant devices and a second network enabling communications between a plurality of devices comprising the steps of:
  - 5 - determining a global unique identifier for each device from the second network;
  - determining a distinct IEEE 1394 address for each device from the second network;
  - representing each device from the second network by a HAVI compliant software element hosted by the gateway;
  - managing communication between devices from the first network and devices from the second network, using for each device from the second network, its corresponding software element associated with the global unique identifier and the IEEE1394 address.
- 10 2. A method according to claim 1, wherein the second network enables communications between a plurality of UPnP compliant devices.
- 15 3. A method according to claim 2, wherein the step of determining a global unique identifier comprises the step of generating a global unique identifier.
4. A method according to claim 2, wherein the step of determining a IEEE 1394 address for each device from the second network comprises a further step of generating a virtual IEEE 1394 address.
- 20 5. A method according to claim 4, wherein the step of generating a virtual IEEE 1394 address comprises a step of generating a bus identifier, representing the second network, according to the standard IEEE 1394.1.
- 25 6. A method according to claim 2, wherein the step of managing communication between devices from the first network and devices from the second network comprises the step of forming a bridge between a first bridge portal connected to the first network and an emulated second bridge portal and the step of managing communication between the emulated second bridge portal and the devices from the second network.
7. A method according to claim 1, wherein the second network enables communications between a plurality of HAVi compliant devices.
- 30 8. A method according to claim 7, wherein the step of determining a global unique identifier comprises the step of retrieving the global unique identifier of the corresponding HAVI device from the second network.

9. A method according to claim 7, wherein the step of determining a IEEE1394 address comprises the step of retrieving the IEEE1394 address of the corresponding HAVi device from the second network.

10. A method according to claim 7, wherein the step of managing communication between devices from the first network and devices from the second network comprises the step of forming a bridge compliant with the IEEE1394.1 standard between a first bridge portal connected to the first network and a second bridge portal connected to the second network.

11. A method according to claim 1, wherein the step of managing communication between a first device from the first network and a second device from the second network includes a step of retrieving, by the first device, the IEEE 1394 address associated to the second device using a discovery and enumeration protocol.

12. A method according to claim 1, which includes a further step of managing virtual registers compliant with IEC61883 specification associated with each device from the second network.

13. A method of interconnection, through a gateway, between a first serial bus network enabling transmission of audiovisual data enabling communications between a plurality of devices, compliant with a first standard of interoperability between devices connected to a serial bus network adapted for audiovisual data transmission, and a second network enabling communications between a plurality of devices comprising the steps of:

- determining a global unique identifier for each device from the second network;
- determining a distinct address compliant with the first serial bus network for each device from the second network;
- representing each device from the second network by a software element, providing an interface for controlling functions of the device, in conformity with the first standard of interoperability, the software element being hosted by the gateway;
- managing communication between devices from the first network and devices from the second network, using for each device from the second network, its corresponding software element associated with its global unique identifier and its address.

14. A gateway enabling the interconnection of a first network of type IEEE 1394 enabling communications between a plurality of HAVi compliant devices and a second network enabling communications between a plurality of devices, wherein the gateway comprises :

- means to determine a global unique identifier for each device from the second network;

- means to determine a distinct IEEE 1394 address for each device from the second network;
- means to represent each device from the second network by a HAVI compliant software element hosted by the gateway;

5 - means to manage communication between devices from the first network and devices from the second network, using for each device from the second network, its corresponding software element associated with the global unique identifier and the IEEE1394 address.

10 15. A gateway according to claim 14, wherein the second network enables communications between a plurality of UPnP compliant devices.

16. A gateway according to claim 15, wherein the means to determine a global unique identifier comprise means to generate a global unique identifier.

17. A gateway according to claim 15, wherein the means to determine a IEEE 1394 address for each device from the second network comprises a further step of generating a virtual IEEE 15 1394 address.

18. A gateway according to claim 17, wherein the step of generating a virtual IEEE 1394 address comprise means to generate a bus identifier, representing the second network, according to the standard IEEE 1394.1.

19. A gateway according to claim 15, wherein the means to manage communication between 20 devices from the first network and devices from the second network comprises means to form a bridge between a first bridge portal connected to the first network and an emulated second bridge portal, and means to manage communication between the emulated second bridge portal and the devices from the second network.

20 25. A gateway according to claim 14, wherein the second network enables communications between a plurality of HAVi compliant devices.

21. A gateway according to claim 20, wherein the means to determine a global unique identifier comprise means to retrieve the global unique identifier of the corresponding HAVI device from the second network.

22. A gateway according to claim 20, wherein the means to determine a IEEE1394 address 30 comprise means to retrieve the IEEE1394 address of the corresponding HAVi device from the second network.

23. A gateway according to claim 20, wherein the means to manage communication between devices from the first network and devices from the second network comprise means to form a bridge compliant with the IEEE1394.1 standard between a first bridge portal connected to the first network and a second bridge portal connected to the second network.

5    24. A gateway according to claim 14, wherein the means to manage communication between a first device from the first network and a second device from the second network comprise, in the first device, means to retrieve the IEEE 1394 address associated to the second device using a discovery and enumeration protocol.

10    25. A gateway according to claim 14, which comprises further means to manage virtual registers compliant with IEC61883 specification associated with each device from the second network.

15    26. A gateway enabling the interconnection of a first serial bus network enabling transmission of audiovisual data enabling communications between a plurality of devices, compliant with a first standard of interoperability between devices connected to a serial bus network adapted for audiovisual data transmission, and a second network enabling communications between a plurality of devices, wherein the gateway comprises :

- means to determine a global unique identifier for each device from the second network;
- means to determine a distinct address compliant with the first serial bus network for each device from the second network;

20    - means to represent each device from the second network by a software element, providing an interface for controlling functions of the device, in conformity with the first standard of interoperability, the software element being hosted by the gateway;

- means to manage communication between devices from the first network and devices from the second network, using for each device from the second network, its corresponding software element associated with its global unique identifier and its address.

25    27. A computer program product comprising instruction sequences adapted to the implementation of a method according to any of the claims 1 to 13, when said program is executed on a computer.